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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/069,936	03/01/2002	Junichi Aizawa	L9289.02136	7237

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EXAMINER

TRAN, TUAN A

ART UNIT	PAPER NUMBER
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2682

DATE MAILED: 12/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/069,936

Applicant(s)

AIZAWA ET AL.

Examiner

Tuan A Tran

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 March 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 5.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Specification

The abstract of the disclosure is objected to because there are more than 150 words. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

1. Claims 1-2, 7-9 and 14-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Kohno et al. (6,763,062).

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Regarding claims 8-9, Kohno discloses a second radio communication apparatus (transmitter side of the base station) that comprises antenna controlling means 50-52 for controlling a transmission directivity to transmit/retransmit a signal in accordance with an information of a control signal transmitted from a first radio communication apparatus (receiver side of the base station), wherein the first radio communication apparatus comprises: estimating means 48, 59 for estimating a channel situation obtained when a signal is received and to output reception quality information; and directivity switching determining means 57 for determining whether to change a directivity of transmission array antenna based on the reception quality information and to transmit a control signal that indicates a change in transmission directivity, wherein the directivity switching determining means 57 orients a directivity of the transmission antenna toward waves other than a main wave when the channel situation is poor (See figs. 2, 7 and col. 5 line 27 to col. 6 line 54, col. 10 lines 3-60).

Claims 1-2, 7 and 14-17 are rejected for the same reasons as set forth in claims 8-9.

Claims 18-19 are rejected for the same reason as set forth in claims 8-9, as method.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 3-6 and 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kohno et al. (6,763,062) in view of Wong et al. (6,453,177).

Regarding claims 10-11, Kohno discloses as cited in claim 8. However, Kohno does not mention that the directivity switching determining means outputs information to widen the beam width of the transmission antenna when the channel situation is poor or to narrow the beam width of the transmission antenna when the channel situation is good. Wong teaches a wireless communication system base station that uses adaptive antenna array wherein the beam width of the transmission antenna directivity is widened or narrowed when the channel situation is poor or good respectively (See figs. 3-4 and col. 2 lines 1-14, col. 6 line 34 to col. 7 line 25, col. 8 lines 29-54). Since both Kohno & Wong disclose the base station that uses directivity antenna array; therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the Wong's teachings in controlling the beam width of the transmission antenna directivity of the Kohno's system in accordance to the channel situation (by the directivity switching determining means) for the advantage of enhancing the system performance.

Claims 3-4 are rejected for the same reasons as set forth in claims 10-11.

Regarding claim 12, Kohno & Wong disclose as cited in claim 10. Wong further discloses the beam width is changed gradually in accordance with a level of the channel situation (See fig. 4 and col. 2 lines 1-14, col. 8 lines 29-54).

Claim 5 is rejected for the same reasons as set forth in claim 12.

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Regarding claim 13, Kohno & Wong disclose as cited in claim 10. Wong further discloses a limitation is provided on changing the beam width of the transmission array antenna (See figs. 3-4 and col. 2 lines 1-14, col. 6 line 34 to col. 7 line 25, col. 8 lines 29-54).

Claim 6 is rejected for the same reasons as set forth in claim 13.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Miya et al. (EP 0948145); Bruckert (5,596,333); Forssen et al. (5,615,409).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Tuan Tran** whose telephone number is **(703) 605-4255**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Vivian Chin**, can be reached at **(703) 308-6739**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

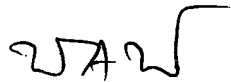
or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

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Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.



Tuan Tran

AU 2682



LEE NGUYEN
PRIMARY EXAMINER